



The Trans-Canada Railway.

By an Act of the Parliament of the Dominion of Canada passed in the year 1895, chapter 68, a charter was granted for the construction of this railway from a point at or near Quebec to the Pacific Ocean at Port Simpson or Port Eslington. This Charter was amended in 1897, chapter 65, so as to provide for the commencement of the works not later than 29th June, 1901, and for their completion within ten years from the passing of the Act, and granting power for the construction of a branch line to Montreal.

As the Quebec and Lake St. John Railway runs north-westward from the City of Quebec in a direction suitable for the shortest location of this railway, and as the rivers flowing into Lake St. John on the one side and James Bay on the other offer a route which will give the easiest gradients crossing the height of land between the waters flowing into the St. Lawrence and those flowing into James Bay, and as this route will give the railway the advantage of two eastern seaports, namely, Quebec and Chicoutimi, it has been decided to make use of that line between Quebec and its north-western terminus at Roberval, Lake St. John.

Work was accordingly commenced at Roberval on the 28th June, 1901, in the presence of an immense concourse of people, the clergy of the district giving the enterprise evidence of their sympathy and support by an impressive religious ceremonial on that occasion. Sixty miles of the railway have also been located from Roberval westward towards James Bay, and the plans and profiles have been deposited with the Dominion and Provincial Governments according to law.

The first division of the railway from Roberval to James Bay, 340 miles in length, will pass through the centre of the new territory recently acquired by the Province of Quebec from the Dominion, so that it would be in the interest of the Province to develop this new territory, 70,000 square miles in area, by this route, in preference to any other. Application has been made to the Province for a land grant, and the question is now under consideration.

Three different explorations of the James Bay territory have been made by Mr. Henry O'Sullivan, C.E., director of Provincial Surveys, and his opinion of the country and its resources is given in a short report from him, annexed hereto.

The Hon. Lomer Gouin, Minister of Colonization and Public Works of the Province of Quebec, made an inspection of the country to be traversed by a portion of the first division of the railway in September last, and expressed himself as being very much surprised and impressed with the fertility of the soil and the resources of the country.

On the 16th February, 1901, the President and other representatives of the Quebec Board of Trade and of the Company had an interview with the Right Hon. Sir Wilfrid Laurier at Ottawa, and submitted a memorial, a copy of which is annexed, setting forth the advantages of the railway at considerable length.

After due consideration the Government recognized the merits of the project and submitted to Parliament a subsidy bill, which was duly ratified, granting a subsidy of \$3,200 per mile—or \$192,000—in aid of the first sixty miles of the railway from Roberval westward, to be increased to \$6,400 per mile, should the cost be in excess of \$15,000 per mile to that extent.

The mileage of the proposed railway, allowing the usual percentage for loss in curvature will compare as follows with other existing routes :

Quebec to Vancouver (C. P. R.)	3,078 miles.
Quebec to Port Simpson (Trans-Canada Railway).....	2,820 "
Chicoutimi to Port Simpson " "	2,705 "
Quebec to Yokohama (via Vancouver).....	7,367 "
Chicoutimi to Yokohama (via Port Simpson).....	6,645 "
Vancouver to Yokohama	4,200 miles.
Port Simpson to Yokohama.....	3,940 "
Quebec to Nottaway.....	570 miles.
Roberval to Nottaway	380 "
Roberval to Chicoutimi	64 "
Winnipeg to Quebec (via C. P. R.).....	1,572 miles.
" " " (via projected T. C. R.).....	1,410 "
" " Chicoutimi " "	1,284 "
" " Nottaway " "	850 "
" " Churchill (projected)	840 "
Moose Factory to Toronto.....	550 miles.
Head Waters St. Maurice to Montreal..	290 "

AVERAGE SUMMER TEMPERATURE

	5 years.	In 1895 *
Moose Factory, James Bay.....	58 degrees.	61
Quebec.....	60 "	63
Rimouski.....	55 "	55
Chicoutimi.....	57 "	60
Winnipeg.....	59 "	—
Norway House.....		59
Oonikup.....		60
Edmonton		60
Athabasca Landing		55
Dunvegan.....		57
Port Simpson.....		55

SNOW-FALL.

Moose Factory..	80 inches	85
Montreal.....	177 "	

SUMMITS.

Trans-Canada (Pine River Pass)	2,800 feet.
" (Peace River Pass).....	2,000 "
Canadian Pacific (Kicking Horse Pass).....	5,400 "

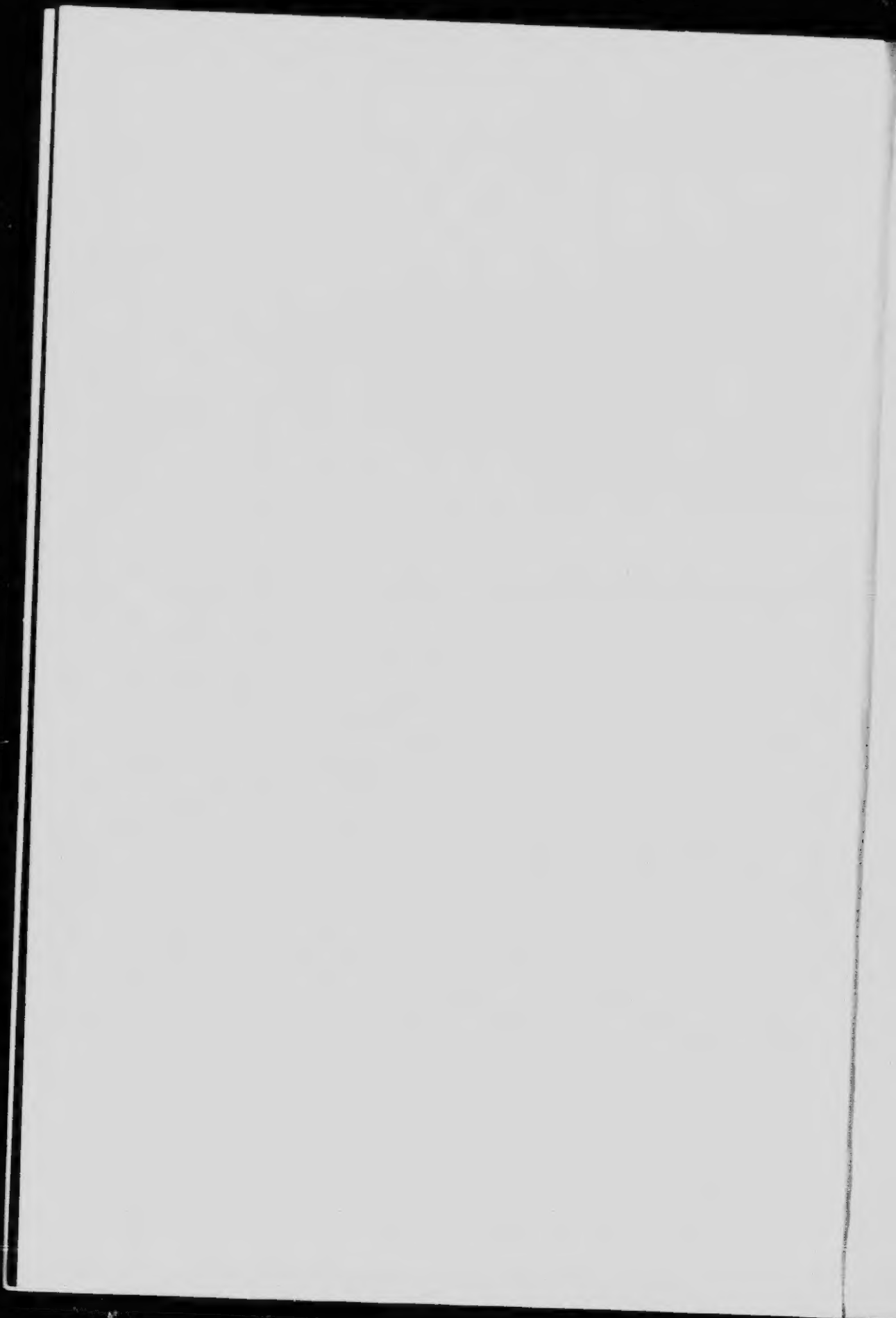
The soil, climate, minerals and other resources of the country between James Bay and the north end of Lake Winnipeg, and between the last named point and Port Simpson via the Peace River Valley, are fairly well known from the reports of the Geological Survey Department at Ottawa. As these reports do not give such ample information as to the country between Lake St. John and James Bay, reports are annexed from missionaries who have lived in the country, from Professor Bell of the Geological Survey, and from Mr. Henry O'Sullivan, C.E., director of surveys of the Province of Quebec.

Quebec, January, 1902.

* Form returns kindly furnished by Mr. R. F. Stupart, Director of Meteorological Service at Toronto.



Party of Emigrants from Finland, leaving Quebec for Lake St. John, to settle on the Line of the First Division of the Trans-Canada Railway.



The Trans-Canada Railway.

QUEBEC, 16th February, 1901.

The Right Hon. SIR WILFRID LAURIER, G.C.M.G.,

PREMIER,

SIR

OTTAWA.

The Quebec Board of Trade and the promoters of the Trans-Canada Railway Company, represented by the delegates now present at this interview, beg respectfully to submit to the Government a very important project, probably the most important which has been brought before the Government of Canada since the inception of the Canadian Pacific Railway.

By an act of the Dominion Parliament passed in 1895 and amended in 1897, a charter was granted for a railway from the City of Quebec, passing north of Lake Winnipeg, to Port Simpson on the Pacific coast, with a branch to Montreal, and this charter is now being amended to provide for branches to Winnipeg and Toronto, and to give the Company the option to start from Lake St. John instead of Quebec.

The annexed map shows the proposed line from Quebec and from the head of navigation of the River Saguenay to James Bay, and thence touching the north end of Lake Winnipeg, passing through the Peace River district and the Peace or Pine River pass, to Port Simpson on the Pacific coast, with branches to Toronto and Winnipeg.

The advantages of such a line would be, briefly, these:—

1. **DISTANCE**—The distance from Quebec to Port Simpson would be 250 miles shorter than that from Quebec to Vancouver by the C. P. R., and from Chicoutimi to Port Simpson 370 miles shorter. The distance from Chicoutimi to Winnipeg would be 280 miles shorter than from Quebec (C. P. R.) to Winnipeg. The distance from Chicoutimi to Yokohama would be 720 miles shorter than from Quebec to Yokohama by C. P. R.
2. **GRADIENTS**—The summit of this line, in the Pine or Peace River pass, would be about 2,000 or 2,800 feet above tide—The C. P. R. summit, further south, is 5,400, and one of the American Pacific roads reaches an elevation of 11,000 feet. The summit between the St. Lawrence and James Bay is less than 1,200 feet, and the approaches to both summits are so gradual that there should be no difficulty in obtaining a maximum gradient of one per cent., from ocean to ocean, and possibly the maximum of 6-10ths of 1%, which is now so eagerly sought for by American Trunk lines.
3. **SEAPORTS**.—The harbor of Port Simpson is said to be the finest on the Pacific coast north of San Francisco. Nottaway is the only deep water harbor on James Bay, and with some dredging can be entered by vessels drawing thirty feet. The coast line of James and Hudson Bays tributary to this railway, will be about 4,000 miles. Chicoutimi (six miles below the town) can be reached by vessels of any draught, and Quebec has magnificent docks, which have cost the Government \$3,000,000, with deep-water berths and elevator facilities for steamships drawing (should such draught be necessary hereafter) forty feet of water. It

is firmly believed that Quebec can be made a winter port for ocean vessels of suitable construction. The Baltic until a few years ago was closed, like the St. Lawrence, all winter. Now, it is regularly and safely navigated all winter by many steamers carrying from 5,000 to 8,000 tons of freight, and with no difficulty as to insurance. In any case, there can be no difficulty in making a winter port at Chicoutimi. The ice in the Saguenay is mostly salt-water ice, easily broken, the Saguenay offers perfect safety for ships, being all deep-water and protected from snow-storms by wall-like banks; and the St. Lawrence from the Saguenay to the sea has none of the shoals and other obstacles which exist to some extent between Tadousac and Quebec. Should these ports be temporarily inaccessible at any time in winter, the bridge now being built at Quebec will give this railway short and easy access to the winter ports of Halifax and St. John.

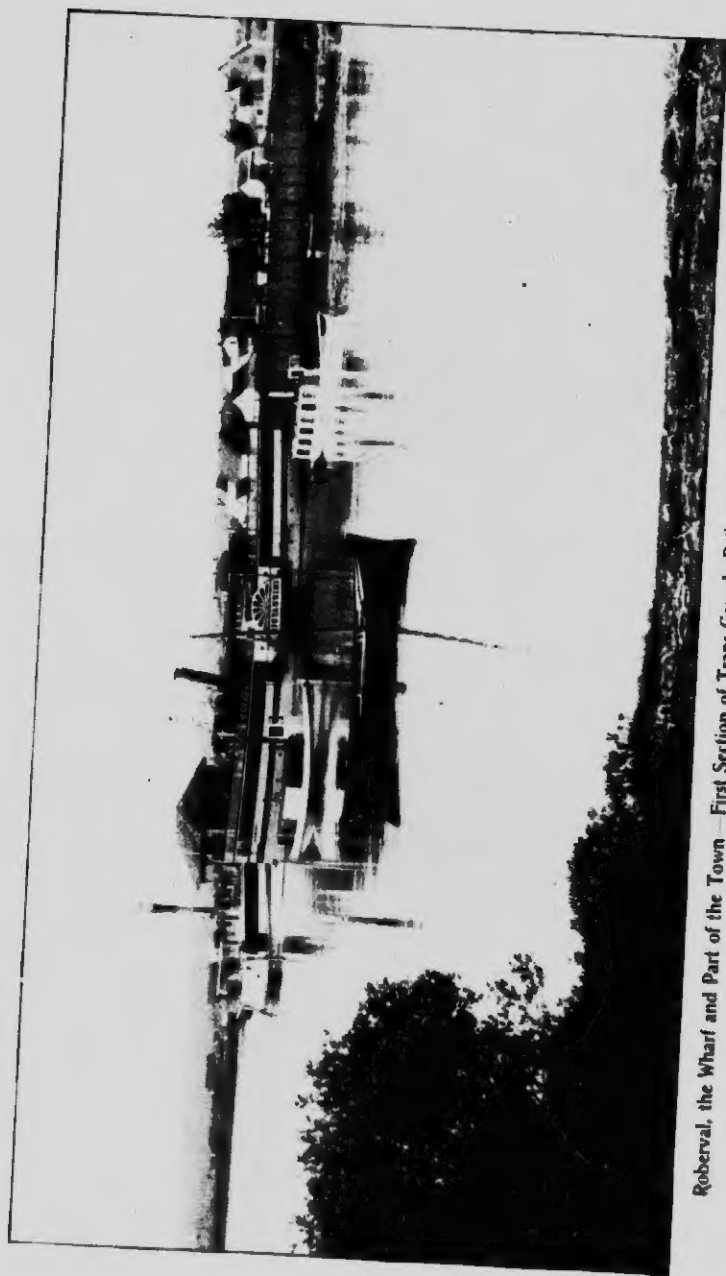
4. **CLIMATE.**—The worst climate to be met with on the proposed line will be that of the country between Lake St. John and James Bay. Recent information goes to show that this has been entirely misrepresented. Observations taken at Moose Factory, on James Bay, prove that the average summer temperature during five years was somewhat warmer than Chicoutimi, and three degrees warmer than Rimouski, and that the average snow-fall was half that of Montreal. So that from a climatic point of view, anything which can be grown at Rimouski, Chicoutimi or Winnipeg, can be grown in the James Bay territory.

5. **SOIL.**—Recent explorations prove that the soil in the James Bay territory is equal to that of the St. Lawrence valley. That of the immense Peace River valley is well known for its fertility, and present information goes to show that the country between James Bay and Lake Winnipeg, and between Lake Winnipeg and Peace River, is also excellent. So that it may be said that the whole country from the Saguenay to the Rockies is fit for settlement and for the raising of cereals, and could support a population of many millions, sufficient in fact, if the zone between this line and the C.P.R. were settled, to raise breadstuffs for the British Isles, and make them independent of all foreign countries.

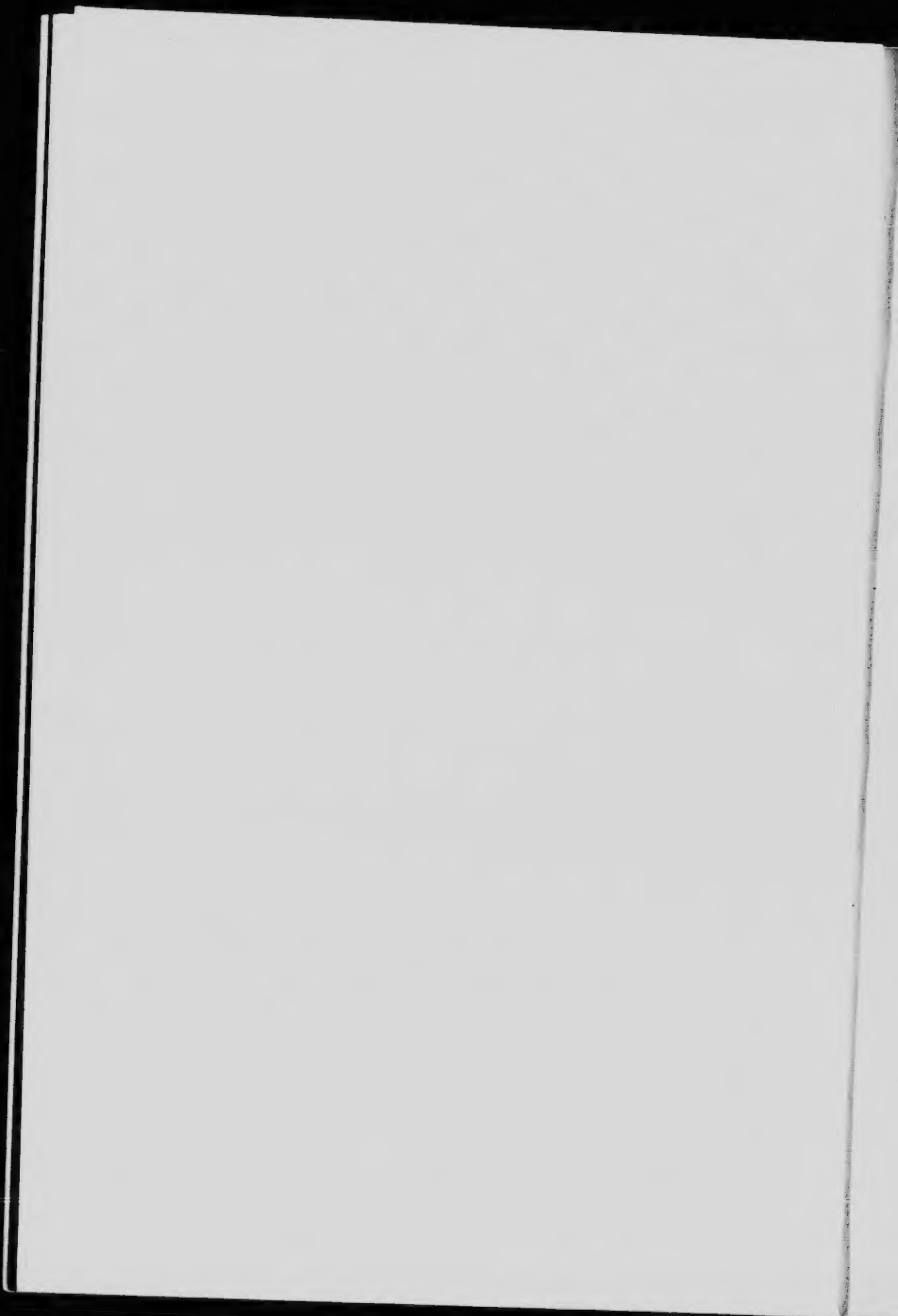
6. **MINERALS AND TIMBER.**—The reports of the Geological Department indicate that this country is rich in minerals. The best of iron is found in the James Bay country, together with lignite coal and copper. The district north of Peace River abounds in petroleum, and the country between the Rockies and the Pacific coast in bituminous and anthracite coal, gold and copper, and a branch from this line would offer the shortest route on Canadian soil to the Yukon gold fields should a railway ever be needed to that country. The James Bay district and the country east and west of Lake Winnipeg are timbered with the best of spruce, and the rivers abound in water-powers to convert this timber into pulp and paper.

7. **MILITARY AND NAVAL.**—In the event of hostilities with our neighbors, which it is sincerely to be hoped may never occur, the present C.P.R. line could be broken in twenty places in a week, and communication would never be restored. The proposed line being from 300 to 600 miles from the frontier, protected by fleets at Quebec, Saguenay, Nottaway and Port Simpson, would be impregnable, and for this reason should receive the support of the British Government. This support need not be costly, as the price of a battleship per annum would pay the interest on the cost of the whole undertaking.

8. **MANITOBA.**—The branch to Winnipeg would give the Province of Manitoba its shortest and cheapest outlet to the seaboard. The saving in distance, the level character of the road and the consequent easy gradients, would, it is estimated, make it profitable to haul wheat to the seaboard at seven cents per bushel less than it now costs the farmer of Manitoba. This saving, even on the present crop, would nearly pay the interest on the cost of the road. Should the navigation of Hudson Straits ever prove practicable, the distance from Winnipeg to the Straits via Nottaway would be no greater than via Churchill, and through a much better country.



Roberval, the Wharf and Part of the Town — First Section of Trans-Canada Railway, and its eastern Terminus at Lake St. John.



For all these reasons we think that the line indicated on the enclosed map would be the best that could be built, from an Imperial as well as Canadian point of view, and it should not be forgotten that for its entire length it will pass through a country between latitudes 47 and 54, or in the same geographical position as Paris, Berlin and Warsaw in Europe.

The great financial success achieved by the Canadian Pacific has rendered it much easier to secure capital for such an undertaking as this than it was twenty years ago, and the project should not have the antagonism of the capital interested in the Canadian Pacific, as it must be beneficial to that road by putting population into the zone of country between the two lines.

The Trans-Canada might readily be amalgamated with Messrs. McKenzie & Mann's Canadian Northern, as its location from the Saskatchewan to Fort Simpson, and from Manitoba to Quebec, would be the best that could be selected for outlets to both oceans for that road.

We have reason to expect that the Province of Quebec will grant a subsidy of land, probably 20,000 acres per mile, for the first section of this railway from Lake St. John to James Bay, about 380 miles, and it is hoped that the Province of Ontario may grant a similar subsidy from James Bay to the western boundary of the Province near Lake Winnipeg.

If the Dominion Government would grant the usual double subsidy of \$6,400 per mile, it is believed that a financial basis would be established which would secure the necessary capital to carry out this most important undertaking which will make Canada a solid country with breadth and great agricultural resources, instead of a fringe of settlement subject, as it now is, to the good will—from day to day—of our powerful neighbors to the South.

Where the line passes through Dominion lands it would of course be expected that the Dominion will grant the same land subsidy as the Provincial Governments.

On this financial basis the promoters of this enterprise would be prepared to suggest the following advantages to Canada, advantages which have never yet been offered to the country by any other railway corporation:—

1.—To construct the entire road with steel rails and steel bridges of Canadian manufacture, thus offering to the new steel and iron works at Sydney, Midland, Sault Ste. Marie and Hamilton an immediate market for an immense quantity of steel.

2.—To give free transportation from Quebec to any point on its line for all immigrants and *bona fide* new settlers and their effects.

3.—To carry wheat from all points on its line in the Province of Manitoba to the ocean steamer at Chicoutimi or Quebec for nine cents per bushel, thus saving the farmer of Manitoba about seven cents per bushel on present freight rates to the seaboard.

We have the honor to be,

Sir,

Your obedient servants,

(Sig.) J. G. SCOTT,

Acting Secretary

Trans-Canada Railway.

(Sig.) GEO. TANGUAY,

President

Quebec Board of Trade.

Translation of a letter from the Rev. Father Nedelec, late Missionary at James Bay

Mattawa, 15th November, 1887.

J. G. SCOTT, Esq.,
Quebec.

DEAR SIR,—

I beg to acknowledge receipt of your letter of the 8th inst., in which you ask me for information about the vast Hudson's Bay territory :—the Siberia of Canada. In order to answer your questions satisfactorily one would have to be an explorer, a geologist, a mineralogist and even a farmer, in a word an expert in every branch of knowledge. I confess that I am only a missionary to the Indians and the shanty men of the Ottawa. Nevertheless, I shall always esteem it a pleasure and a duty to oblige you to the utmost of my capacity, to the depth of my knowledge and extent of my observations. Beyond this, I can but refer you to good authorities on each subject. But to answer your questions :—

- 1st.—The country is generally habitable, excepting a few places, chiefly along the coast. Along the East coast the fishing is good.
- 2nd.—All kinds of grain, except wheat and buckwheat, also fruit and vegetables, are, as a rule, grown with success, except in a few scattered places on the coast.
- 3rd.—I find it difficult to say what population might be supported in this territory. There is room for millions, with improved agriculture and the development of industries.
- 4th.—The extreme heat is 100° and extreme cold on the coast—55°. Average in January 3°.
- 5th.—In some places the climate is better than that of the north of Germany, Poland, Norway, north of Scotland, Lake St. John, Newfoundland. In some parts the natural resources are magnificent, in others not so good. As a general rule it resembles Quebec and the district of Lake St. John. All that I can say is that the country is larger and more habitable than can be imagined.
- 6th.—The soil is in general of clayey nature. See "Les Relations des Jésuites;" Journey from Lake St. John to Hudson's Bay—Proulx. See also reports of Bowen, Stipendiary Magistrate, of Manitoulin Islands, Ontario—favorable.
- 7th.—Between Lake Temiscamingue and height of land, white and red pine, spruce and soft birch abound; on the other side of the height of land, spruce, soft birch and cedar.
- 8th.—See the report of Dr. Bell, geologist, as to minerals.
- 9th.—Any amount of fur, birds and fish; whales also abound. See the report of Captain Gordon, 1885, 1886-7.
- 10th.—The snow-fall is not excessive.

SUCH IS HUDSON'S BAY.

What was Canada 200 years ago? What were the United States? In my opinion it would be a good thing for the Province of Quebec to take possession of that part of Hudson's Bay that belongs to it. Your Company ought to establish Acadian settlements in the Bay. They are the very people for the country, and when the resources of the country are developed and wealth amassed, a steamboat should be sent from Quebec to further develop and explore the country, while waiting for the railway through the valley of St. Maurice.

Yours truly,

(Signed,)

J. M. NEDELEC, O. M. I.,
Indian Missionary.



Moose Factory, James Bay Some of the Bishop's Cattle.



Moose Factory, James Bay Bishop's Residence.



EXTRACTS FROM A LETTER FROM REV. FATHER PARADIS, FORMERLY MISSIONARY
AT MOOSE FACTORY.

"This territory is very suitable for settlement and the land is first-class. From Lake Temiscamingue, which is 650 feet above the sea, to Moose Factory, a distance of 300 miles is one black clay plain, very suitable for grain, and well wooded with maple and other hardwoods. At the height of land, 920 feet above the sea, pine is found in abundance, also some very large poplar. From Lake Abittibi to James Bay the finest spruce in America is to be found, and on the south side of the mountains some red pine.

TEMPERATURE:—The thermometer has been as low as 50 below zero at Moose Factory—in summer as high as 100 above; at the height of land the summers are colder; average snow-fall three feet, which is much less than at Quebec.

PRODUCTS:—The best possible potatoes and all root crops, are grown here. Grain has not been tested to any great extent. I think wheat would succeed as well as in Manitoba. Oats, hay and barley would certainly succeed. Natural hay, excellent for cattle-raising, is very plentiful. Excellent beef is raised here.

GAME:—Wild geese and duck are abundant at Fort Albany, north of Moose Factory; 36,000 geese are killed there annually for provisions for the Hudson's Bay Company by the Indians, that being the number they are expected to furnish.

MINERALS:—See Dr. Bell's report. I find him very conscientious in his reports. Gypsum abounds at the mouth of the Abittibi River. I think there is coal and petroleum on the river. Iron is plentiful. Mineral springs abound.

Sturgeon abound in the rivers; and on the east coast, 30 miles from shore, porpoises and all fish found in the Gulf of St. Lawrence, are found in great abundance.

I have no hesitation in recommending the construction of a railway from Quebec to James Bay. Indians say that the land towards Lake Mistassini is also very level with a clay soil. Towards the height of land it is sandy and rocky. Some prairies, 4 to 6 miles wide, without trees, extend to the west of James Bay, according to the Indians some 1200 miles.

I think this country might be compared to Germany in Europe, and the Fort Albany district with Russia.

The climate resembles that of Kamouraska, with the same flowers, wild fruits, such as gooseberries, strawberries, juniper berries and cranberries.

At Moose Factory there are some splendid gardens, containing currants, gooseberries and all kinds of vegetables. In one of them there is an ash tree, planted ten years ago, that now measures 18 inches diameter.

Ice leaves the rivers about end of April, and the Bay is navigable from 5th to 18th May. Closes from 1st to 20th November. The highest tide is 10 feet."

LETTER FROM PROFESSOR BELL.

HEAD OF THE GEOLOGICAL SURVEY DEPARTMENT.

OTTAWA, 7th March, 1887.

J. G. SCOTT, Esq.,

Quebec.

DEAR SIR, —

Your favor of the 4th reached me this morning, and I beg to answer your questions *seriatim* as follows:—

1.—A considerable proportion of the territory southward of James Bay is fit for settlement.

2.—My own explorations have not extended eastward of the Basin of Moose River. In that Basin a great deal of good land is found between the water shed of the great lakes and the commencement of the low level country to the south westward of James Bay. This would comprise about one-third of the region between Lake Superior and James Bay. The soil is mostly brownish gravelly loam and light colored clay, with sand in some parts. In the coniferous forests, when the ground is level, the surface is apt to be covered with deep moss, but when this timber has been burnt off and replaced by deciduous trees, the ground is dry.

3.—The summer and winter temperatures resemble those of the County of Rimouski. The summers not so hot, nor the winters so cold as at Winnipeg.

4.—The average snow-fall is about three feet, or a little more, still not quite so great as about the City of Quebec.

5.—Potatoes and all other kinds of root crops have been found to do remarkably well. Hay also grows luxuriantly. Barley would, I think, be a sure crop every year, and rye could also be grown with advantage. Barley is sown every year at Moose Factory and Rupert's House, and it has ripened well every year that I have visited these parts. Still it is said to fail some years. However, these places are much further north than the region I have indicated, and what is worse for them, they are near the sea, which is said to have an unfavorable influence in the autumn. Mr. John McIntyre (now of Fort William) says he has ripened wheat at Missinibi and New Brunswick House, within the above area. I have had experiments made at New Brunswick House and at Norfolk on the Abitibi River, with a great variety of field and garden seeds, and the results proved that this region is capable of growing anything which can be raised, say in the County of Rimouski. I regard the region as well suited for stock raising and dairy farming, and it is not unlikely to prove fit for grain also.

The soil at Moose Factory is heavy and cold, still vegetables, &c., grow successfully here. Among the kinds may be mentioned potatoes, beans, peas, turnips, beets, carrots, cabbages, onions, &c., &c. As showing the absence of summer frost at Moose Factory in 1877, I mention at page 27 c of my report for that year, that, on our return to Moose Factory (from the North), in the end of September, we found that there had been no frost there all summer, and the most tender plants, such as melons and cucumbers, beans, balsams, tobacco, the castor oil bean, &c., growing in the open air, were still quite green and flourishing. That summer was, however, probably a finer one than usual.

It has been objected to this statement by some Hudson Bay Co's men, that I should have mentioned that some of the above plants had been started in the house. But all I wanted to show, was the absence of summer frosts that year. These plants are generally started under glass in other parts of Canada as well.



Field of Wheat, St. Felicien First Section of Trans-Canada Railway, West of Roberval.



6.—White and red pine grow in the southern part of the basin of Moose River, but the timber most abundant throughout the whole country, consists of white and black spruce, tamarac, white cedar (as far north as Moose Factory), white birch, aspen, rough-barked poplar, "Jack" pine and bouleau. There is a little elm, and black ash, in the southern part, but it is not worth counting commercially. Some of the above woods are worth exporting.

7.—Minerals are to be found in this region; nearly all the metals are to be looked for in the Huronian formation, a belt of which is believed to run all the way from near Lake Abitibi, to the south of Lake Mistassini, and this would be crossed by any railway from Quebec to James Bay. Iron and gypsum are abundant to the north-west of Moose Factory.

The shores of Hudson's Bay, that would be tributary to the projected railway, afford a variety of useful minerals in paying quantities.

8.—Coal cannot be said to have been found in the region under consideration. I found lignite in various places on the Missinabi and Moose Rivers; also indications of it on the Mattagami and Albany Rivers, but the quality was mostly inferior, and in a well wooded country like this, would not be in demand for fuel. I also found anthracite on a long island on the east coast of Hudson's Bay, but I do not think the quantity likely to prove great, although the quality was first-class. As far as we are yet aware, there is a chance, geologically speaking, of finding coal in the islands on James Bay, but we have no evidence, as yet, of its actual existence there.

9.—Among the fish found in James Bay and Hudson's Bay, may be mentioned a fine white fish, lake trout of Lake Superior, and some smaller species, sea trout, salmon, rock cod, capling, &c., besides strictly fresh water fishes in the rivers and lakes, such as speckled trout, Back's grayling and pickerel, pike, &c. The fisheries of the bay will probably be found to be valuable. The oil producing animals, such as seals and porpoises, may be included under "*the fisheries*."

10.—I have not considered the subject sufficiently, as yet, to say whether I would recommend the construction of a railway from Quebec to James Bay, or not; but if it should be decided to go on with such a line, the objective point might be the mouth of the Rupert River, the southern extremity of Rupert Bay, or Hannah Bay. Deep enough water can, I think, be found at these points and leading out from them, although the south end of James Bay is shallow. If a railway were built to the south end of James Bay, steamers might run up the East main coast, which I believe (from experience) will prove attractive as a summer resort for the people of the United States and Canada.

For further information, I would refer you to some of my reports under page 27 c, with general survey reports for 1879-80, and page 7 c, on ditto for 1877-78.

I am, Dear Sir,

Yours truly,

(Signed,) ROBERT BELL, C.E., M.D.

LETTER FROM PROFESSOR BELL,

HEAD OF THE GEOLOGICAL SURVEY DEPARTMENT.

OTTAWA, 30th Aug., 1902.

DEAR MR. SCOTT,

I thank you for your letter of 27th inst., and the copy of the new edition of the prospectus of the Trans-Canada Railway. It is very well gotten up and contains much valuable information. Your line on the map showing the northern limit of the growth of cereals is not too far north. In fact it almost corresponds with the north limit of possible wheat culture. I have had wheat ripened for two years at Waswanipi, S. E. of Rupert's House.

As the existing railways will probably be unable to move the phenomenal grain crop of Manitoba and the N. W. Territories this year, the present ought to be a favorable opportunity for promoting your Trans-Canada Railway.

Very truly yours,

ROBERT BELL.

J. G. SCOTT, Esq.,
Acting Secretary,
Trans-Canada Railway,
Quebec.

LETTER FROM MR HENRY O'SULLIVAN,

DIRECTOR OF PROVINCIAL SURVEYS

LORETTE, 29th DECEMBER, 1901.

J. G. SCOTT, Esq.,
General Manager
Trans-Canada Railway Co.,
Quebec.

DEAR SIR :

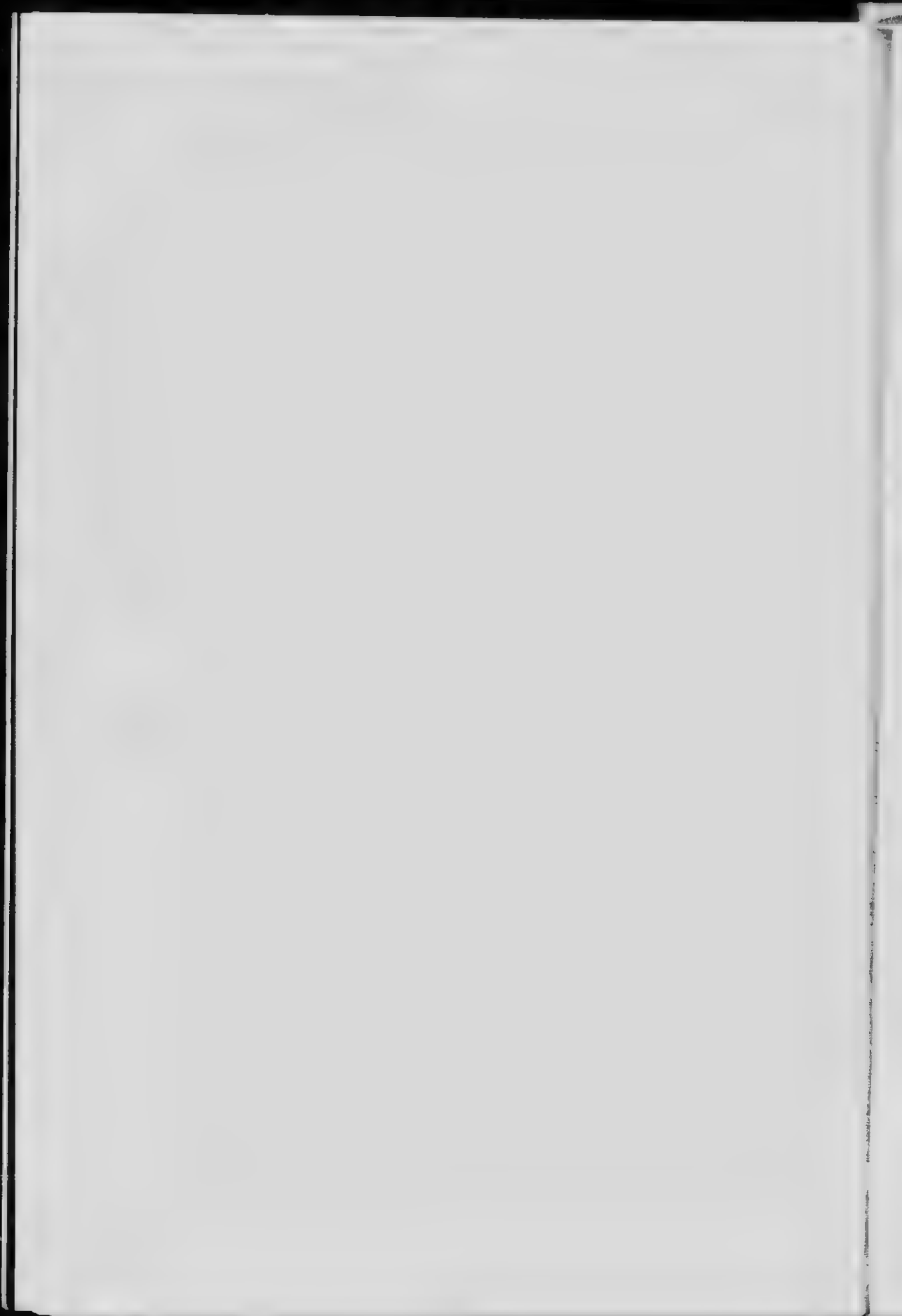
Your letter of the 26th inst., asking for information regarding the northern portion of our province between the height of land and James Bay recently acquired from the Dominion Government, duly received, and in response I will endeavor to answer your questions in the order given :—

1st.—“What proportion, approximately, of the territory in question, south of East Main River and west of Lake Mistassini, would you consider to be fit for settlement?”

Ans.—From what can be seen by following the principal water-courses and occasional runs inland I may say that over two-thirds of the land area should be fit for cultivation, for there are no mountains of any great extent, and the land generally rises in easy swells from the lower levels of the river beds, and unless that extensive



Portage à l'Ours Falls, Ashuapmouhouan River First Section of Trans-Canada Railway.



swamps may exist in the level plains between the main water-ways, there is no reason why the greater part of the country would not be fit for settlement should climatic conditions prove favorable.

2nd.—“What is the nature of the soil?”

Ans.—The soil is chiefly clay or clayey or sandy loam, with here and there knolls of pure sand thickly covered with jack pine wherever the country has been burnt.

There are also some patches paved with boulders, generally in the neighborhood of chutes and rapids, but the proportion of rocky land is far less to the north of the St. Lawrence watershed than to the south. I can speak of this from my own personal knowledge of the country, for I have ascended all the rivers that drain the St. Lawrence slope to the height of land from the meridian of Lake Mistassini westward to the Ontario boundary, and I can safely say that, as regards the nature of the soil, the northern slope is far superior to the southern.

3rd.—“What is the nature of this climate? and what about the snowfall?”

Ans.—My explorations in that region were chiefly made during the summer months, from June until October inclusive, and I did not experience any marked difference between the climate there and on the St. Lawrence slope in equal altitudes. The rainfall in my opinion is greater; but my assistants, who wintered in the neighborhood of Rupert House in 1897-8 and traversed the country from there to Lake Abitibi in March and April, report that the snowfall is less than in the regions bordering the River St. Lawrence.

Taking a mean of the observations of my party, and from what I could learn from the natives and the Hudson Bay Company's men, I should say that the average depth of snow in mid-winter would be between 3 and 4 feet.

As you will see by the tables in my last report of progress kindly furnished me by Mr. Stupart, director of the Meteorological Bureau, Toronto, taking the mean of the six months of summer, May to October inclusive, for three years, gives the climate of Moose Factory several degrees warmer than that of Rimouski.

I enclose you under another cover a copy of said report of progress with accompanying plans and profiles.

4th.—What description of grain and root crops do you consider could be profitably raised if there were railway communication through the center of this territory? and is the country suitable for raising live stock?

Ans.—Oats, barley, peas and buckwheat. Wheat has been raised at Waswanipi, about the center of the region in question and the grain grown from seed raised there succeeded as well as from the seed sent there by Dr. R. Bell, Director of the Geological Survey, from the experimental farms.—See Dr. Bell's reports 1895-6. Potatoes, cabbage, turnips and nearly all kinds of vegetables grown in Canada, are successfully raised at Waswanipi, Rupert House and Moose Factory, and even as far north as East Main Fort.

It appears that sheep are more successfully raised at the latter post than at Rupert House.

Splendid horned cattle are raised at all these posts: the only drawback to stock raising there may be in the length of the winters.

5th.—“Is the country well timbered, and with what kinds of timber?”

Ans.—The country is in general well covered with spruce, the chief marketable timber; poplar and bouleau (white birch) are also found in abundance, wherever forest fires have made their mark. Banksian or jack pine is seen in the poorer districts, but there is no white or yellow pine beyond the height of land, with the exception of a few straggling groves in the neighborhood of Lake Abitibi.

A species of large poplar called *Lind* or balm of Gilead, grows very extensively in the Mekiskan Valley, some large enough to give four or five saw-logs of from one to 2½ feet diameter without limb or knot.

This kind of timber is said to be earnestly sought for by cabinet-makers. Tamarac for railway construction is found throughout the entire region, but a goodly portion of it has been recently killed by the saw fly.

6th.—“What minerals are likely to be found?”

Ans.—Iron in abundance, copper, gold; in fact all the minerals may be looked for in the Huronian belt that traverses this region from Lake Mistassini westward. See Geological Reports.

7th.—“What are the fisheries, and are they likely to prove valuable?”

Ans.—The whitefish, trout, sturgeon, pike and doré of the interior lakes and rivers of the Nottaway basin will certainly become valuable if railway communication is had there.

There are no sturgeon in the Rupert waters, but all the other kinds of fish mentioned above are taken there in abundance.

I am not sufficiently informed to say what the fisheries of James and Hudson Bay may be; all I can say is that while surveying the coast in the neighborhood of the mouth of the East Main River, I saw several porpoises playing around, and I have seen an abundance of trout and whitefish taken by the Indians between there and Rupert House.

8th.—“Can a good seaport be obtained on James Bay, and with what depth of water?”

Ans.—James Bay is in general very shallow. The H. B. Co. ships cannot go within seven miles of Moose Factory.

At the mouths of the Rupert and Little Nottaway Rivers, safe harbors may be had for vessels of from ten to fourteen feet draught, but they can only enter at high tide.

At the mouth of the Great Nottaway sufficient water is found for the largest vessels afloat, but a considerable amount of dredging would have to be done before they can enter there.

9th.—“Are there any good water-powers, and what are the largest?”

Ans.—An abundance of water-power is found at convenient intervals all over the country.

I measured one on the Great Nottaway,—a river as large as the Ottawa and in places a mile in width,—that gave about 400,000 horse-power, and three on the Rupert,—another immense River,—that gave over 300,000 each; one of them gave 350,000 horse-power.

My information as to this country is derived from three different explorations made by me for the Provincial Government in 1894, 1897 and 1899, one from Temiscamingue and Lake Victoria, one from the headwaters of the St. Maurice, and one from Lake St. John, returning in 1897 by the Moose River and Lake Superior. I have followed the Nottaway and its three branches from their sources to the mouth of that immense river at James Bay.

A large portion of this country forms a great clay plain which may be compared as to soil with the valley of the St. Lawrence between Montreal and Quebec.

Sincerely yours,

HENRY O'SULLIVAN,
D. L. S. & C. E.,
Mem. Can. Soc. C. E.

EXTRACT OF SPEECH MADE BY MR. T. O. DAVIS, M.P., FOR SASKATCHEWAN,
IN THE HOUSE OF COMMONS AT OTTAWA IN MARCH 1902, ON THE QUESTION
OF TRANSPORTATION OF GRAIN.

"What we want is a continuous line of railway, which can be operated twelve months in the year and double track if necessary. Last year four hundred thousand people in the West produced 100,000,000 bushels of grain. We are going to get people in there at the rate of 100,000 per year, and in eight or ten years, the production of that country will be increased to 400,000,000 or 500,000,000 bushels. Wheat will have to be carried to the seaboard, and that cannot be done over our canals when they are frozen up six months in the year. What we want is to be able to put our wheat on the car and run it through to the seaboard. There has been too much money spent trying to create an artificial port—trying to make an ocean port out of something that was never intended to be so by nature. If half that money had been spent on the port of Quebec in providing proper facilities there—where we have a port that can float the largest ship that will be built in the next twenty years—and if we had a railway running from the centre of the Territories right into the port of Quebec, from where our produce could be shipped twelve months in the year, you would not hear anything about the car shortage we hear so much about at present.

Then we have to take into account the depreciation in the value of wheat and the charges for interest and insurance if it has to be stored over during the winter, which must amount to at least six cents per bushel. There is also this further point to be considered. If we have to depend wholly on our canals, we will have to store an immense quantity of wheat in the elevators at the head of Lake Superior, and when navigation opens in the spring and we throw that on the markets of the world, down goes the price, so that our farmers will be out, not only the loss in storage and insurance, but also the depreciation in value on account of such an immense quantity being thrown on the market.

What we want is a continuous line of railway from the West to some ocean port, and Quebec is the proper place. This would enable us to send our commodities to a port, which would be kept open twelve months in the year, and in this way we would stimulate the production of grain and other products in the North-West, and thus not only increase the trade of that part of the country, but the trade and wealth of the whole Dominion. This Government has still a large domain of public lands at its disposal notwithstanding the 7,000,000 acres which our honorable friends opposite gave away to railways. Notwithstanding their extravagance in this respect, we have still left millions of acres of fertile land, the property of the people of this country, and by providing proper transportation facilities, by opening up and developing the country, by getting immigrants in there, we will increase the value of our own public domain to such an extent that we would have sufficient in ten years to pay the whole public debt of the country."

THE RIGHT REV. W. CARPENTER BOMPAS, D.D., BISHOP OF SELKIRK, WHO HAS
LIVED NEARLY ALL HIS LIFE IN THE TERRITORY IN QUESTION, SAYS:—

"The line you propose for your railway is exactly that which I would have desired to open up the vast territories in which I have been most interested and partly resident for the greater part of my life. The huge sealed wastes, formerly known as the Hudson's Bay territories, are, I trust, now destined by your railway to be opened up to civilization. I cannot imagine any plan so well adapted to enlarge widely the boundaries of the habitable earth.

The approach of your railway to Hudson's Bay I think most valuable in every way, both in the way of commerce and in defence of the Dominion if needful. Your further course by way of Norway House, Green Lake, Athabasca Landing and Lesser Slave Lake, I deem very advantageous in the way of commerce and partly for settlement of the country, and especially as a route of communication with the far north country of Mackenzie River and the Great Northern Lakes, Great Slave Lake and Great Bear Lake, with their fine fur countries and the rich timber and oil country of Athabasca.

Then you come to Peace River, which I deem one of the chief gems of the whole Dominion. I think it certain to be settled up as soon as your railway reaches it. It has been a shame that so fine a country should remain unsettled only for want of means of communication with it.

You then pass the Ominica gold mines, which are now again successfully worked, and when I descended the Skeena River, I learned that the whole country from Peace River to Port Simpson was a level tract admirably suited for carrying a railway through it.

The route of your railway is just what I could have wished. I cannot be otherwise than interested in your success, because your railway offers ground for expecting the realization of a long cherished hope that those vast northern regions would yet emerge from solitude and desolation into life and activity.

I deem your project admirable and bound to succeed."

SOME FIGURES as to the probable effect which the construction of the Trans-Canada Railway would have in reducing the freight on grain from Manitoba and the Northwest, and in bringing it direct to the ocean vessel at Canadian seaports, instead of allowing it to drift to Buffalo and New York via the great lakes, thus putting an end to the grain congestion now existing in the Northwest.

The Trans-Canada Railway will not only be the shortest possible route from the Northwest to the seaboard, but will be a flat line throughout, and will have the choice of two seaports, Chicoutimi and Quebec. The former—the ice in the Saguenay being salt water ice—can without doubt be made a winter port, and Quebec is probably good for 12 and certainly for 10 months in the year,* and in case of any temporary interruption the new bridge at Quebec will give a short route to St. John or Halifax.

The distance from Manitoba to Chicoutimi by the Trans-Canada will be 1284 miles, and the route so level and the summit so low, that the new standard grades of 6-10ths of 1 per cent will be easily had.

A modern freight engine will haul from 30 to 35 car loads (1000 bushels per car) of wheat over these grades.

Put the rate as low as 9 cents per bushel, and the result would be as follows:

EARNINGS.

30 cars at 9c. per bushel, or \$90 \$2,700

COST.

The total cost of operating (including maintenance and all other expenses), based upon the experience of similar roads in Canada would be 78 cents per train mile, but let us say 80 cents, 1,284 miles at 80c

Add one-fourth for empty cars to be brought back 257

1,284

And there will be a profit of \$1,416 or 52 per cent.

The same rate of freight could be made to Quebec, or by the branch to Montreal, authorized by the charter, and still leave a handsome margin of profit.

It now costs the farmer of Manitoba to get his wheat to the seaboard:

RR. freight, Manitoba points to Fort William, per bushel..... 10 c

Water freight, Fort William to Montreal 06½c

16½c

Or

Manitoba to Fort William 10 c

Fort William to Buffalo and New York 06½c

Elevating 00½c

17½c

This cost will be somewhat reduced when the Canadian Northern reduces its rate from Manitoba to Port Arthur, but not to any appreciable extent as compared with the above figures.

So that if the above figures are correct, the new route would save the farmer of Manitoba, or increase the value of his grain where grown, 7 to 8 cents per bushel.

This, on the 100 million bushel crop of last year, which will probably be greatly increased every year hereafter, would mean a saving or increased value of at least seven millions of dollars.

* Schooners are now (20th March, 1902,) running between Quebec and the lower St. Lawrence, and ferry steamers running between Quebec and Levis every few minutes, night and day, without the slightest difficulty.

TRANS-CANADA RAILWAY COMPANY

Names of Promoters and Shareholders.

Col George Earl Church	London, England.
Richard Biddulph Martin	do
Frank Crisp	do
Hon. Francis Clemow	Ottawa.
J. A. Gemmill	do
Thos. L. Willson	do
George Tanguay, M.P.	Quebec
John T. Ross	do
Gaspard LeMoine	do
Victor Chateauvert	do
J. G. Scott	do
William Price	do
W. A. Marsh	do
Estate Hon. J. Arthur Paquet ..	do
T. A. Piddington	do
Hon. P. Garneau	do
Vesey Boswell	do
Estate Hon. R. R. Dobell	do
William Shaw	do
Hon. N. Garneau	do
L. A. Robitaille	do
N. Rioux	do
E. Beaudet	do
E. E. Ling	do
E. J. Hale	do
Cy. Tessier	do
Lorenzo Evans	do
J. Burstall & Co	do
N. Flood	do
Frank W. Ross	do
Jas. MacNider	do
A. E. Vallerand	do
G. G. Stuart	do
W. M. Macpherson	do
Henry O'Sullivan	do
A. E. Doucet	do
Hon. Jules Tessier	do
Lorne Webster	do
Guy Tombs	do
Alex. Hardy	do
S. S. Oliver	do
A. Robitaille, M.P.P.	do
J. D. Guay	Chicoutimi.
J. E. A. Dubuc	do
O. Côté	St. Alphonse, Chicoutimi.
Lt.-Col B. A. Scott	Roberval.
Jos Girard, M.P.	St. Gédéon.
George T. Davie	Levis, Q.
William Hanson	Montreal.
W. Reeves	do
Col. James McNaught	New York.
H. H. Melville	Boston.
John Farson	Chicago.
W. J. Hilds	do



58-59 VICTORIA.

CHAP. 68.

An Act to incorporate the Trans-Canadian Railway Company.

[Assented to 22nd July, 1895.]

WHEREAS a petition has been presented praying for the incorporation of a company to construct and operate a railway and for other purposes as hereinafter set forth, and it is expedient to grant the prayer of the said petition: Therefore, Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, declares and enacts as follows:

1. George Earl Church, Richard Bidduph Martin and Frank Crisp, all of London, England; the Hon. Francis Clemow and J. A. Gemmill, of Ottawa, together with such persons as become shareholders in the Company hereby incorporated, are hereby constituted a body corporate under the name of "The Trans-Canadian Railway Company," hereinafter called "the Company."

2. The head office of the Company shall be in the city of London, England, or in such place in Canada as the directors from time to time determine by law.

3. The Company may lay out, construct and operate a railway of the gauge of four feet eight and one-half inches from a point at or near the city of Quebec thence westerly and as nearly as practicable in a straight line to a point north of Lake Winnipeg: thence westerly by way of the Yellow Head or other convenient and practicable pass in the Rocky Mountains; and thence by the Skeena River to Port Simpson or Port Essington, with the option of adopting any other more feasible route west of the Rocky Mountains to reach a point on the Pacific coast between fifty-two and fifty-five degrees north latitude: and the Company may, for the purpose of building its line of railway, divide it in to three sections: the first section to extend from Quebec to a point at or near the northern end of Lake Winnipeg, the second section from the last mentioned point to the eastern limit of the Rocky Mountains, and third section from thence to the Pacific coast.

4. The Company may,—

(a.) for the purposes of its business and in connection with its railway, construct, purchase or otherwise acquire, charter, obtain, control, navigate and keep in repair steamers and other vessels to ply between ports in Canada and between ports in Canada and ports outside of Canada, and carry and convey passengers and freight and carry on a general transportation service in connection with the said railway, and may sell and dispose of such vessels:

(b.) construct, purchase, lease or otherwise acquire and hold wharfs, docks, elevators and warehouses on the line of the said railway as from time to time constructed;

(c.) acquire and utilize water and steam-power for the purpose of generating electricity for lighting and motor purposes in connection with its railway or any branch or part thereof, and may operate the said railway or any branch or part thereof by electricity;

(d.) construct, equip, acquire and operate telegraph and telephone lines beyond the said railway to any point on James' Bay, Hudson's Bay and Hudson's Straits, and may lay submarine lines for telegraph and telephone connection between such points.

Company may enter upon public roads	3. With the consent of the municipal council having jurisdiction over the roads and streets of any city, town, or municipality, the Company may, by its servants, agents or workmen, enter upon any public road, highway, street, bridge, water-course navigable or non-navigable water or other such places in any city, incorporated town, village, county, municipality, or other place, for the purpose of constructing, erecting, equipping, working and maintaining its line or lines of telegraph and telephone upon, along, across, over and under the same; and may erect, equip and maintain such and so many poles or other works and devices as the Company deems necessary for making, completing and supporting, using, working and maintaining the system of communication by telegraph and telephone, and may stretch wires and other telegraphic and telephonic contrivances thereon; and, as often as the Company, its agents, officers or workmen think proper, may break up and open any part whatsoever of the said public roads, highways, streets, bridges, water-courses, navigable and non-navigable waters and other like places, subject, however, to the following provisions, that is to say:—
May erect poles	(a) The Company shall not interfere with the public right of travelling on or using such public roads, highways, streets, bridges, or water-courses, and other like places, and shall not do any unnecessary damage, nor in any way obstruct the entrance to any door or gateway or free access to any building erected in the vicinity;
And open public roads	(b.) The Company shall not affix any wire less than twenty-two feet above the surface of the street or road, nor without the consent of the municipal council having jurisdiction over the roads or streets of the municipality, erect more than one line of poles along any street or road.
Travel, & not to be obstructed	(c) In all municipalities the poles shall be as nearly as possible straight and perpendicular, and shall, in cities, be painted, if so required, by any by-law of the Council;
Height of wires &	(d) Whenever, in case of fire, it becomes necessary for its extinction or the preservation of property, that the poles or wires should be cut, the cutting under such circumstances of the poles or any of the wires of the Company, under the direction of the Chief Engineer or other officer in charge of the fire brigade, shall not entitle the Company to demand or to claim compensation for any damage thereby incurred;
Kind of poles	(e) The Company shall be responsible for all damage which its agents, servants or workmen cause to individuals or property in carrying out or maintaining any of its said works;
Cutting poles or wires in case of fire	(f) The Company shall not cut down or mutilate any shade, fruit or ornamental tree;
Location of poles	(g) In all municipalities the opening up of streets for the erection of poles, or for carrying the wires under ground, shall be subject to the direction and approval of such engineer or other official as the Council appoints, and shall be done in such manner as the Council directs, the Council may also direct and designate the places where the poles are to be erected in such municipality, and the surface of the streets shall in all cases be restored as far as possible to its former condition by and at the expense of the Company;
Trees	(h.) No Act of Parliament requiring the Company in case efficient means are devised for carrying telegraph or telephone wires under ground, to adopt such means, and abrogating the right given by this section to continue carrying lines on poles through cities, towns or incorporated villages, shall be deemed an infringement of the privileges granted by this Act;
Approval of municipality	(i) No person shall labour upon the work of erecting or repairing any line or instrument of the Company, without having conspicuously attached to his dress a medal or badge on which shall be legibly inscribed the name of the Company and a number by which he can be readily identified;
Carrying wires under ground	(j) Nothing herein contained shall be deemed to authorize the Company, its servants, workmen or agents to enter upon any private property for the purpose of erecting, maintaining or repairing any of its works, without the previous assent of the owner or occupant of the property for the time being.
Workmen or workmen	
Private property	

(4.) If in the removal of buildings, or if in the exercise of the public right of travelling on or using any public road, highway or street, it becomes necessary that the said wires or poles be temporarily removed, by cutting or otherwise, it shall be the duty of the Company, at its own expense, upon reasonable notice in writing from any person requiring the same, to remove such wires or poles; and in default of the Company so doing, it shall be lawful for any such person to remove the same at the expense of the Company, doing no unnecessary damage thereby; and such notice may be given either at the office of the Company, or to any agent or officer of the Company in the municipality wherein such wires or poles are required to be removed, or in the case of a municipality wherein there is no such agent or officer of the Company, then either at the head office or to any agent or officer of the Company in the nearest or any adjoining municipality to that in which such wires or poles require to be removed.

Temporary
removal of
wires

6. The persons mentioned by name in the first section of this Act are hereby constituted provisional directors of the Company.

Provisional
Directors

7. The capital stock of the Company shall be twenty million dollars, and may be called up by the directors from time to time as they deem necessary, but no one call shall exceed ten per cent on the shares subscribed.

Capital stock

8. The annual general meeting of the shareholders shall be held on the first Monday in September in each year.

Annual
Meeting

9. At such annual meeting the subscribers for the capital stock assembled, who have paid all calls due on their shares shall choose not less than seven nor more than eleven persons to be directors of the Company, one or more of whom may be paid directors of the Company.

Subscribers
for capital stock

10. The Company may issue bonds, debentures or other securities to the extent of twenty-five thousand dollars per mile of the railway and branches, and eight thousand dollars per mile additional debentures for each mile double-tracked, and such bonds, debentures or other securities may only be issued in proportion to the length of railway constructed or under contract to be constructed, or double tracked.

Issue of
bonds, debentures
or other securities

11. The Company, being first authorized by a resolution passed at a special meeting of its shareholders duly called for the purpose, may from time to time issue additional bonds in aid of the acquisition or construction of any steam or other vessel which by this Act it is authorized to acquire or construct, not exceeding in amount the cost of such vessel; and the proceeds of such bonds shall be applied exclusively in aid of the acquisition by purchase or construction of such vessels, according to the terms and intention of such resolution; and each such resolution shall indicate by some general description the vessel or vessels with respect to which it authorizes bonds to be so issued as aforesaid and whether the same are then acquired or are to be thereafter acquired by the Company.

Issue of
bonds in aid of
acquisition or
construction of
vessels

12. For the purpose of securing each issue of such bonds the Company shall execute a deed of mortgage not inconsistent with the law or with the provisions of this Act, in such form and containing such provisions as are approved by a resolution of such general meeting of shareholders as aforesaid, each of which deeds shall be made to trustees, to be appointed at such special general meeting for that purpose, and may contain provisions establishing the amount secured upon the vessel, or class of vessels to which it relates, the rank and privilege to appertain to the bonds intended to be secured by it, the rights and remedies to be enjoyed by the respective holders of such bonds, the mode of assuring the application of the proceeds of such bonds to the purposes for which they are to be issued, the rate of interest payable upon them, and the place and

Securing
bonds by
mortgage

time of payment of such interest and of the capital thereof, of the creation of a sinking fund for the redemption of such bonds, and all such conditions, provisions, and restrictions requisite for the effectual carrying out of the terms thereof, and for the protection of the holders of such bonds; and it may charge and bind the tolls and revenues of the vessel or vessels or class of vessels to which it relates, and the whole or any part of any subsidy to be earned in connection therewith (but not the railway or the tolls and revenues thereof), in the manner and to the extent therein specified, and each such deed of mortgage shall create absolutely and exclusively a first lien and encumbrance on the vessel, or class of vessels therein described, as well as on their tolls, revenues and subsidy therein hypothecated, the whole for the benefit of the holders of the bonds with respect to which it is made.

Rank of bond-
holders

17. Each issue of bonds intended to be secured by any one of the deeds of mortgage referred to in the next preceding section, shall entitle the respective holders thereof to rank with each other *pari passu*, and a duplicate of such deed shall be deposited and kept in the office of the Secretary of State of Canada.

Erection of
warehouses,
&c.

18. The Company may grant or lease to any person the right to erect on the grounds belonging to the Company, warehouses, elevators or other buildings or works for the purpose of giving greater facilities to the public in doing business with the Company; and the buildings or works so erected shall not be bound by or subject to any mortgage or lien on the property of the Company, without the consent of the owner of such buildings or works.

60-61 VICTORIA.

CHAP. 65.

An Act respecting the Trans-Canadian Railway Company, and to change the name of the Company to the Trans-Canada Railway Company.

[Assented to 29th June, 1897.]

Preamble.
1897, c. 65

WHEREAS the Trans-Canadian Railway Company, incorporated by chapter sixty-eight of the Statutes of 1895, has, by its petition, prayed that the Act incorporating the said Company may be amended as hereinafter set forth, and it is expedient to grant the prayer of the said petition: Therefore, Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

Name
changed

1. The name of the Trans-Canadian Railway Company, hereinafter called "the Company," is hereby changed from "The Trans-Canadian Railway Company" to "The Trans-Canada Railway Company," but such change in name shall not in any way impair, alter or affect the rights or liabilities of the Company, nor in any wise affect any suit or proceeding now pending or judgment existing either by, or in favour of, or against the Company, which, notwithstanding such change in the name of the Company, may be prosecuted or continued, completed and enforced as if this Act had not been passed.

Existing
rights and
liabilities not
affected

2. The Company may, in addition to the powers contained in its Act of incorporation, construct a branch from a point near where the proposed main line of the Company will cross the St. Maurice River in the province of Quebec, thence southerly to the village of Montcalm in the parish of St. Liguori, and thence in a direct line to the city of Montreal; but the construction of such branch shall not be commenced until after two hundred miles of its main line, beginning at the city of Quebec, have been constructed and put into operation.

3. Notwithstanding anything contained in *The Railway Act*, the construction of the said railway shall be commenced and fifteen per cent on the amount of the capital stock of the Company expended thereon within four years and completed within ten years from the passing of this Act, otherwise the powers granted to the Company shall cease and be null and void as respects so much of the railway as then remains uncompleted. Time extended for completion of railway.

4. Any Act hereafter passed for the purpose of controlling railway companies incorporated by or subject to Parliament as to the issuing of stock or bonds, and as to rates or tolls and the regulation thereof, and as to running powers over or other rights in connection with the railway of any company by any other company, and the exercise of powers conferred upon railway companies, shall apply to the Company from the time such Act goes into effect; but this section shall not be construed to imply that such Act would not apply to the Company without the enactment of this section. Provisions of Acts relating to railways.

2. EDWARD VII.

CHAP.

An Act respecting the Trans-Canada Railway Company.

[Assented to 1902.]

WHEREAS the provisional directors of the Trans-Canada Railway Company have, by their petition, prayed that it be enacted as hereinafter set forth, and it is expedient to grant the prayer of the said petition: Therefore, His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, declares and enacts as follows:— Preamble.

1. Notwithstanding anything contained in *The Railway Act* or in the Acts relating to the Trans-Canada Railway Company, hereinafter called "the Company," it is hereby declared that the Company shall have ten years from the passing of this Act within which to complete the railway authorized by the said Acts; and if the said railway is not completed within the said period, the powers of construction conferred upon the Company by Parliament shall cease and be null and void with respect to so much of the said railway as then remains uncompleted. Time for completion of railway extended.

2. Section 2 of chapter 63 of the Statutes of 1895 is repealed, and the following is substituted therefor:— 1895, c. 63, New s. 2.

"2. The head office of the Company shall be in the city of Quebec or in such other place in Canada as the Company from time to time determines by by-law." Head office.

39 Section 6 of the said Act is repealed, and in lieu thereof it is enacted that George Earl Church, Richard Biddulph Martin and Frank Crisp, all of London, England, the Honourable Francis Clemow and J. A. Gemmill, of the city of Ottawa, George Tanguay, John T. Ross, Gaspard LeMoine, Victor Chénier, J. G. Scott, William Price, W. A. Marsh, T. A. Piddington, the Honourable P. Gauthier, Vesey Boswell, William Shaw, the Honourable N. Garneau, L. A. Robitaille, N. Rioux, E. Baudet, E. E. Ling, A. E. Doucet, the Honourable Jules Tessier, Guy Tombs, Alexandre Hardy and S. S. Oliver, all of the city of Quebec, E. A. Scott, of Roberval, George T. Dayne, of Lévis, J. D. Guay and J. E. A. Dubay, of Chicoutimi, Joseph Girard, of St. Gédéon, Onésime Côté, of St. Alphonse, William Hanson, of Montreal, W. Reeves, of Montreal, James McNaught, of New York, H. H. Melville, of Boston, Massachusetts, A. Robitaille, of Quebec, John Farnon, of Chicago, and Thomas L. Willson, of St. Catharines, Ontario, shall be the provisional directors of the Company, of whom seven shall form a quorum.

1. The Company may continue the construction of its main line, which was commenced at Roberval on the Quebec and Lake St. John Railway, from that point in a westerly or north-westerly direction, and may build a branch line from the nearest point on its main line to Deep River near the mouth of the Nitawaty River, and also a branch line from Chicoutimi to the mouth of the Saguenay River at or near St. Catherine's Bay.

2. The Company may, subject to agreement with the Quebec and Lake St. John Railway Company, exercise running powers over the said railway to Quebec and Chicoutimi.

3. The Company may enter into an agreement with the Great Northern Railway of Canada, the Quebec and Lake St. John Railway Company, or the Canadian Northern Railway Company, for conveying or leasing to such company the railway of the Company, in whole or in part, or any rights or powers required under this Act, as also the franchises, surveys, plans, works, plant, material, machinery and other property to it belonging, or for an amalgamation with such company, on such terms and conditions as are agreed upon, and subject to such restrictions as to the directors seem fit, provided that such agreement has been first approved by two-thirds of the votes at a special general meeting of the shareholders duly called for the purpose of considering it, at which meeting shareholders representing at least two-thirds in value of the stock are present or represented by proxy, and that such agreement has also received the sanction of the Governor in Council.

2. Such sanction shall not be signified until after notice of the proposed application therefor has been published in the manner and for the time set forth in section 239 of *The Railway Act* and also for a like period in one newspaper in each of the counties or electoral districts through which the railway of the Company runs, and in which a newspaper is published.

3. A duplicate of the agreement referred to in subsection 1 of this section shall, within thirty days after its execution, be filed in the office of the Secretary of State of Canada, and notice thereof shall be given by the Company in *The Canada Gazette*, and the production of *The Civil Gazette* containing such notice shall be *prima facie* evidence of the requirements of this Act having been complied with.

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COMPARISONS of the Temperature, Rain and Snowfall for each month, the year, the Winter quarter
at MOOSE FACTORY, JAMES BAY, with Stations in other parts of Canada. MOOSE FACTORY
exclusively from observations noted in the reports of the Government Meteorological Bureau.

	TEMPERATURE									RAINFALL				
	Moose Factory	Rimouski	Dalhousie	Chicoutimi	Winnipeg	Port Arthur	Ottawa	Montreal	Quebec	Moose Factory	Rimouski	Dalhousie	Chicoutimi	Winnipeg
	°	°	°	°	°	°	°	°	°	In.	In.	In.	In.	In.
JANUARY.....	-3.4	9.7	8.7	-1.7	-13.2	-3.7	12.0	12.1	7.8	0.09	0.03	..	0.00	0.00
FEBRUARY....	1.8	14.9	15.0	2.2	6.1	0.9	4.4	5.9	6.6	0.06	0.21	0.06	0.00	0.00
MARCH.....	11.9	22.6	22.0	3.6	8.8	8.0	12.3	13.2	11.8	0.19	0.75	1.25	0.00	0.00
APRIL.....	25.2	32.7	33.1	31.7	35.6	32.5	36.2	37.7	35.9	0.36	1.37	1.89	0.50	1.00
MAY.....	43.9	43.5	45.0	48.3	50.6	44.3	55.3	55.4	51.9	1.01	2.59	3.67	0.75	1.75
JUNE.....	52.4	53.1	55.9	53.8	60.5	54.4	63.1	62.1	59.8	3.13	2.95	3.54	9.10	3.00
JULY.....	62.5	57.4	62.8	66.0	64.0	61.2	69.1	69.2	66.5	3.22	3.49	3.86	4.22	2.00
AUGUST.....	59.2	56.0	59.8	56.9	58.8	56.1	62.4	63.0	61.6	3.84	3.34	4.66	3.22	1.00
SEPTEMBER...	51.0	51.0	54.4	48.3	52.8	50.6	54.9	55.4	52.9	4.27	2.84	3.99	3.32	0.75
OCTOBER.....	39.1	41.0	42.0	39.0	37.5	37.3	43.9	44.1	42.3	1.79	3.07	3.34	3.03	0.75
NOVEMBER....	21.3	29.1	27.5	25.2	26.3	24.9	32.8	32.8	31.0	0.52	1.18	2.15	0.98	0.00
DECEMBER....	9.9	17.0	15.6	8.1	8.6	16.2	17.5	19.4	16.2	0.16	0.73	1.13	0.15	0.00
YEAR.....	31.2	35.7	36.8	31.8	32.1	32.2	38.7	39.2	37.0	19.44	22.55	29.04	25.27	11.25
WINTER.....	3.4	15.7	15.2	1.4	3.5	1.7	9.6	10.4	8.7	0.34	0.99	1.31	0.00	0.00
SUMMER.....	57.6	54.8	59.0	57.1	58.8	56.0	62.2	62.5	60.3	11.38	9.67	12.01	10.76	5.30

the Winter quarter (*January to March, inclusive*) and the Summer quarter (*July to September, inclusive*)
 Moose FACTORY averages from the years 1877 to 1882. The other Stations are from the year 1885,
 Geological Bureau, Toronto.

RAINFALL.

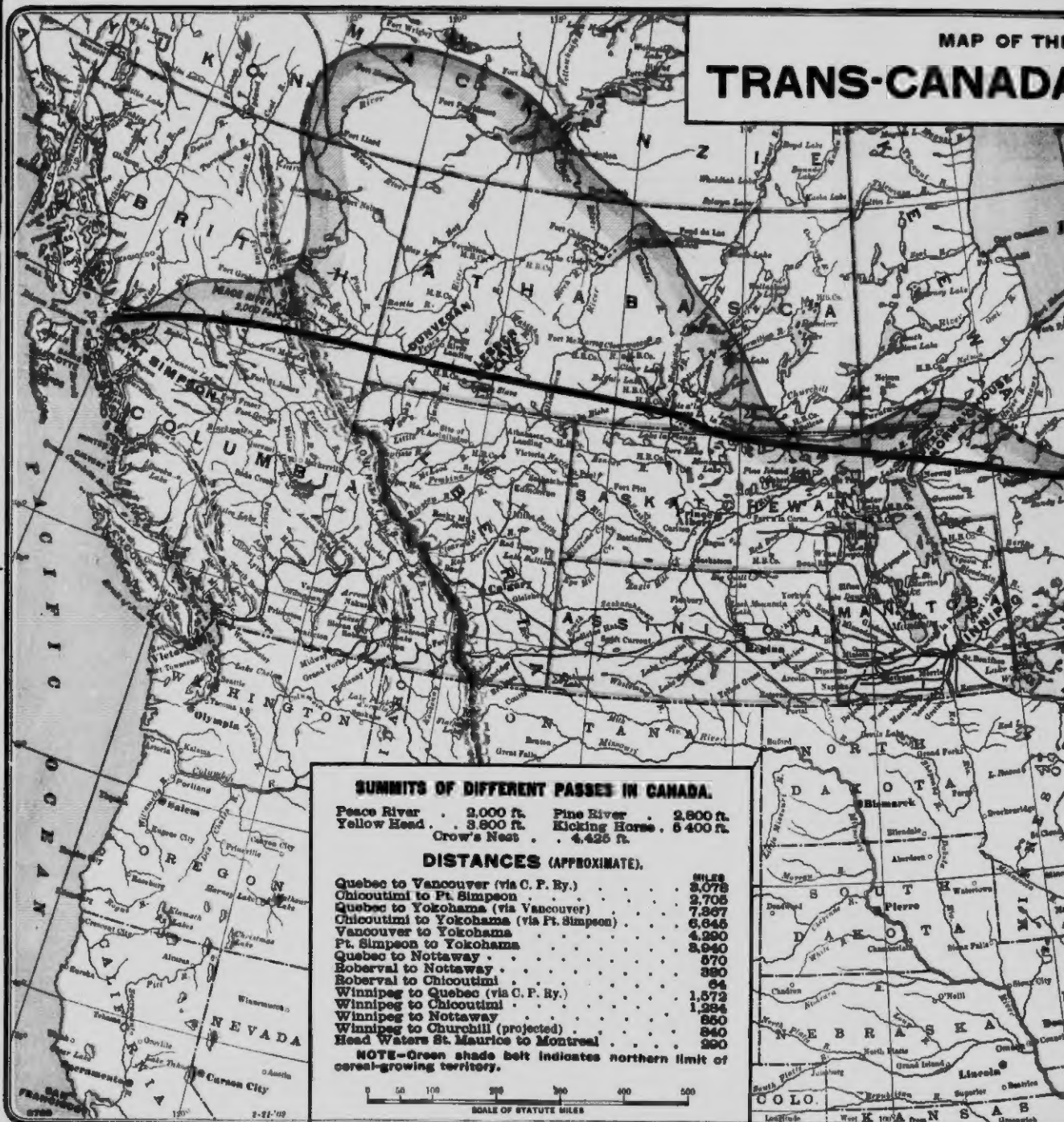
SNOWFALL.

Chicoutimi	Winnipeg	Port Arthur	Ottawa	Montreal	Quebec	Chicoutimi	Winnipeg	Port Arthur	Ottawa	Montreal	Quebec
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
06 0.00	0.00	0.00	0.19	1.11	1.32	14.2	28.2	23.6	8.8	2.3	2.3
25 0.00	0.00	0.00	0.00	0.50	0.00	6.5	13.7	21.1	14.9	4.2	5.4
89 0.60	0.00	0.00	R	0.36	0.80	12.9	19.6	21.2	2.4	11.2	11.2
17 0.50	1.32	1.89	3.32	1.16	0.38	6.5	10.8	8.7	8.9	8	6.6
54 0.7	1.70	1.43	2.57	1.66	2.00	3.7	0.8	0.2	...	2.4	...
36 4.22	2.65	4.25	2.73	2.85	2.92	...	...	...	...	...	...
66 3.22	1.94	1.44	1.91	2.46	2.29	...	...	...	...	...	...
99 3.32	0.72	1.66	3.18	4.16	4.24	...	...	...	...	...	...
34 3.03	0.33	0.31	3.19	7.17	4.40	3.6	2.8	0.8	0.5	2.6	0.6
15 0.98	0.07	0.67	2.49	2.27	0.58	16.7	14.9	9.1	12.0	7.3	8.8
13 0.15	R	R	0.14	1.38	0.41	16.2	16.3	16.8	35.0	12.1	4.2
24 25.27	11.28	14.93	22.34	28.69	22.21	80.3	107.1	101.8	82.5	42.2	39.1
31 0.00	0.00	0.00	0.19	1.97	1.62	33.6	61.5	65.9	26.1	17.7	18.9
01 10.76	5.31	7.35	7.82	9.47	9.45						





MAP OF THE TRANS-CANADA



SUMMITS OF DIFFERENT PASSES IN CANADA.

Peace River	2,000 ft.	Pine River	2,800 ft.
Yellow Head	3,800 ft.	Kicking Horse	5,400 ft.
Crow's Nest	4,425 ft.		

DISTANCES (APPROXIMATE).

Quebec to Vancouver (via C. P. Ry.)	MILES
Chicoutimi to Pt. Simpson	3,078
Quebec to Yokohama (via Vancouver)	7,705
Chicoutimi to Yokohama (via Ft. Simpson)	7,867
Vancouver to Yokohama	6,946
Pt. Simpson to Yokohama	4,290
Quebec to Nottaway	2,540
Roberval to Nottaway	570
Roberval to Chicoutimi	380
Winnipeg to Quebec (via C. P. Ry.)	64
Winnipeg to Nottaway	1,572
Winnipeg to Churchill (projected)	1,284
Head Waters St. Maurice to Montreal	850
	840
	200

NOTE—Green shade belt indicates northern limit of cereal-growing territory.



MAP OF THE NADA RAILWAY

